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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,737	10/27/2003	Keisuke Endo	1982-0205P	9716
2292	7590	12/29/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			PHAM, HAI CHI	
			ART UNIT	PAPER NUMBER
			2861	

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/692,737

Applicant(s)

ENDO ET AL.

Examiner

Hai C Pham

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-10 and 21 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/27/03 & 3/8/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I including claims 1-10 and 21, in the reply filed on 11/15/04 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura et al. (U.S. 5,940,115).

Nakamura et al., an acknowledged prior art, discloses a method and apparatus for irradiating a photosensitive material that has an emulsion layer (61) with a laser beam to form a convex (or concave) cavity at an interior of the surface layer as dots whose arrangement forms a predetermined marking pattern (col. 8, line 64 to col. 9, line 17) (Figs. 1 and 4).

Nakamura et al. further teaches:

- the photosensitive material being an X-ray film (7),
- controlling an oscillation output of the laser oscillator and an illumination time of the laser beam (such that unnecessary fog and combustion does not occur) (col. 4, lines 36-41).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al.

Nakamura et al. teaches using a CO₂ gas laser with a peak wavelength of 10.6 μm , an output of 40W and an irradiation time depending on the output or energy density of the laser being used to form a dot of about 200 μm diameter. Although Nakamura et al. does not teach the claimed limitations related to the laser beam irradiation condition, Nakamura et al. does suggest that the laser output should be carefully selected, e.g., laser beam irradiation time period, energy density, without causing deformation or deterioration on image surface of the X-ray film. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select the parameters of the laser beam as claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

6. Claims 2, 5, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. in view of Ohashi et al. (U.S. 5,665,502).

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Nakamura et al. discloses all the basic limitations of the claimed invention except for the projecting height of the convex portion forming the dot with respect to the surface of the surface layer being 10 μm or more and 50 μm or less.

Ohashi et al. discloses a method for marking the surface of the photoreceptor to form dots with an outer diameter generally from 50 to 150 μm and a height (h) of the convex portion of the edge of the dot about 2 to 100 μm such that the marking portion can be distinguished from non-marking portion.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to form marking dots on the photosensitive material with dimensions as taught by Ohashi et al. in the device of Nakamura et al. The motivation for doing so would have been to render the marking portion of the photosensitive material distinguishable from the non-marking portion as suggested by Ohashi et al.

Allowable Subject Matter

7. Claims 6 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: the primary reason for the indication of the allowability of claim 6 is the inclusion therein, in combination as currently claimed, of the limitation of forming the marking pattern to have top-bottom symmetry at both side of the cut line along the longitudinal

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direction of the X-ray film, which is not found taught by the prior art of record considered alone or in combination.

Claim 9 is allowable because it is directly dependent form claim 6 above.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L Talbott can be reached on (571) 272-1934. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HAI PHAM
PRIMARY EXAMINER

December 23, 2004